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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/201,867	11/30/1998	YUTAKA TAKAMI	HIT2944	2148

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EXAMINER	
AKERS, GEOFFREY R	

ART UNIT	PAPER NUMBER
3624	

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/201867	T Shiomi
Examiner	**Art Unit**
Thong Q	3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☑ Responsive to communication(s) filed on 9/15/03.

2a) ☐ This action is **FINAL**. 2b) ☑ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☑ Claim(s) 23-40 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☑ Claim(s) 23-40 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Request for Continued Examination(RCE)

1. This action is issued in reply to applicant's Request for Continued Examination(RCE)(Paper # 24) and Response both filed on 9/15/03.

2. No claims were amended further. None were added.No more were canceled.

3. Claims 23-40 are pending.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 23-26,38 as amended, are rejected under 35 USC 103(a) as unpatentable over Jones(US Pat. No: 5,632,547) in view of Brachtl(US Pat. No: 4755,940).

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6. As per claim 23 Jones teaches a terminal device used in an electronic money system comprising a data processor which processes data in an IC card storing electronic money information(col 2 line 15-45) and a communication circuit which communicates with a second external device through a public line(col 4 lines 6-12)(Fig 1/5)(col 5 line 41) a switching circuit which switches between a first path and a second path(col. 5 lines 48-52) said first path

outputting data input from a first external device (col 5 line 49)to said communication circuit and said second path outputting electronic money data from said data processor to said communication circuit(Fig 1/lb/2b/3b)(col 4 lines 1-18). Jones fails to teach a control circuit which controls a data processor to switch from a first path to a second path at a time of transaction of electronic money. Brachtl teaches a control circuit which controls said data processor, said communication circuit, and said switching circuit wherein, said control circuit controls said switching circuit to switch from said first path to said second path at a time of transaction of electronic money information(Abstract).Brachtl teaches an electronic funds transfer system(EFT) in which terminals are connected through a public switched telecommunications network to card issuing agencies data processing centers(Abstract)(Fig 2)(Fig 1/10/12/14/16/18/20)(col 6 lines 20-42). It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl to teach the above. The motivation is to provide a method for performing EFT under a higher security transaction system.

7. As per claim 24 Jones teaches a terminal device according to claim 23. Jones does not specifically teach wherein said control circuit controls said switching circuit to switch from said second path to said first path after completion of said transaction of electronic money information.Brachtl teaches this.Brachtl teaches a control circuit which controls said data processor, said communication circuit, and said switching circuit wherein, said control circuit controls said switching circuit to switch from said first path to said second path at a time of

transaction of electronic money information(Abstract).Brachtl teaches an electronic funds transfer system(EFT) in which terminals are connected through a public switched telecommunications network to card issuing agencies data processing centers(Abstract)(Fig 2)(Fig 1/10/12/14/16/18/20)(col 6 lines 20-42). It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl to teach the above. The motivation is to provide a method for performing EFT under a higher security transaction system. to provide for separate transactions between distinct accounts without commingling.

8. As per claim 25 Jones teaches a terminal device according to claim 23. Jones does not specifically teach wherein said control circuit controls said switching circuit to switch from said first path to said second path inaccordance with a designation from said first external device to start said transaction of electronic money information. Brachtl teaches a control circuit which controls said data processor, said communication circuit, and said switching circuit wherein, said control circuit controls said switching circuit to switch from said first path to said second path at a time of transaction of electronic money information(Abstract).Brachtl teaches an electronic funds transfer system(EFT) in which terminals are connected through a public switched telecommunications network to card issuing agencies data processing centers(Abstract)(Fig 2)(Fig 1/10/12/14/16/18/20)(col 6 lines 20-42). It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl to teach the above. The motivation is to provide a method for performing EFT under a higher security transaction system. The motivation for this is to operate on separate accounts as necessary.

9. As per claim 26 Jones teaches a terminal device according to claim 23, further comprising a display device(Fig 1/1b/2b/3b)(col 5 lines 34-35) and an input-output device(col 5 lines 44-52).

10. As per claim 38 Jones teaches a terminal device according to claim 23 Jones does not specifically teach wherein electronic money can be transmitted along a second path regardless of the operational state of the first external device.Brachtl teaches an electronic funds transfer system(EFT) in which terminals are connected through a public switched telecommunications network to card issuing agencies data processing centers(Abstract)(Fig 2)(Fig 1/10/12/14/16/18/20)(col 6 lines 20-42) which permits wherein electronic money can be transmitted along a second path regardless of the operational state of the first device.. It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl to teach the above. The motivation is to provide a method for performing EFT under a higher security transaction system.

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11. Claims 27- 35, 39-40 are rejected under 35 USC 103(a) as unpatentable over Jones(US Pat. No: (US Pat. No: 5,778,067) in view of Brachtl(US Pat. No: 4,755,940) and further in view of Benton(US Pat. No: 4,454,414).

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12. As per claim 27 Jones teaches a terminal device according to claim 23. Jones does not specifically teach further comprising a power circuit having a storage battery. Benton teaches this(col 5 lines 3-10).It would have been obvious to one skilled in the art at the time of the

invention to combine Jones in view of Brachtl and further in view of Benton to teach the above. The motivation is to have a storage battery to supply energy to the circuitry for storage.

13. As per claim 28 Jones teaches a value transfer system having a terminal device according to claim 27(Fig 1/5) as the user's input computer connected by a communication line to a host computer at a bank(col 5 lines 41-42). Jones fails to teach the system wherein said storage battery is charged through said communication circuit.Benton teaches a terminal device and system with a power supply from the host computer(col 5 lines 3-10). It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl and further in view of Shiobara to teach the above. The motivation for this is establishing a means for charging the signal processing circuitry as a means for operating on the value transfer network.

14. As per claim 29, Jones teaches a value transfer system having a terminal device according to claim 27(Fig 1/5).Jones fails to teach the system further comprising a power supply circuit receiving power supply from an external power source. Benton teaches a terminal device and system with a power supply device(col 5 lines 8-10)(Fig 2/46). It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl and further in view of Benton to teach a power supply circuit in a terminal device wherein a storage battery is charged through said power supply circuit.The motivation for this is to create an energy source through the conventional electrical power supply for the operation of the system.

15. As per claim 30 Jones teaches a terminal device according to claim 27. Jones does not specifically teach comprising a power receiving circuit which receives power from an external

power source. Benton teaches this(Fig 2/46) and a selector which selects one of said power receiving circuit(Fig 1/30/38) and said power circuit wherein said selector selects said power receiving circuit to apply an output voltage of said power receiving circuit as supply voltage to said terminal device in an ordinary state(col 5 lines 3-11), and selects said power circuit to apply the output voltage of said power circuit as supply voltage to said terminal device.It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl and further in view of Benton to teach the above. The motivation is to regulate the voltage level to the terminal.

16. As per claim 31 Jones teaches a terminal device according to claim 30, connected by a telephone communications system to host computers(col 5 lines 41-42).Jones fails to teach that the electronic money transaction system further comprises a light emitting device capable of generating light instruction signals and combined with an external information processor and a light receiving device capable of receiving the light instruction signals and combined with said terminal device wherein, upon receiving the light instruction signal, the external information processor provides at least an electronic money information transaction start instruction to be given to the control circuit to instruct the control circuit to start the electronic money information transaction. Benton teaches an optically coupled, portable module funds transfer system(col 2 lines 27-37), which provides an electronic funds transfer system wherein at the point of transaction a pair of modules are aligned to permit a beam of light to act as a carrier and

create an optical coupling link and permit transfer of electronic funds(col 2 lines 38-44).It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl and further in view of Benton to teach the above. The motivation for this is to describe an alternative means of funds transfer in an electronic money transfer system.

17. As per claim 32 Jones teaches a terminal device according to claim 31 connected to host computers in an electronic money transfer system(col 5 lines 41-42)(Fig 1/5/1/2/3). Jones fails to teach the apparatus further comprising an input device that enters instructions to said control circuit combined with said terminal device at least an electronic money information transaction start requesting device combined with said light receiving device . Benton teaches the apparatus further comprising an input device that enters instructions to the control curcuit combined with the terminal device at least an electronic money information transaction start requesting device combined with a light receiving device (col 2 line 54-col 3 line 7) wherein, said input device provides the electronic money information transaction start instruction to the control circuit, and the electronic money information transactions are carried out through said electronic money information transaction start requesting device.It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl and further in view of Benton to teach the above. The motivation for this is for improved reliability and convenience as opposed to electrical connnections with their intermittant failures.

18. As per claim 33 Jones teaches an electronic money information transaction system according to claim 23. Jones does not specifically teach wherein said data processor comprises a

display capable of displaying image information. Benton teaches this(col 3 lines 17-22). It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl and further in view of Benton to teach the above. The motivation for this is to have a display of the figures in the accounts to track transactions.

19. As per claim 34 Jones teaches a terminal device according to claim 23. Jones does not specifically teach wherein said second path further comprising a light emitting device which transmits data processed. Benton teaches this (col 3 line 11-14) in said data processor as light signals and a light receiving device which receives the light signals from said light emitting device, and provides the light signals to said communication circuit(col 4 lines 22-cot 5 line 30)(col 3 lines 27-45).It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl and further in view of Benton to teach the above. The motivation for this is to describe an electronic money transaction system utilizing optical coupling.

20. As per claim 35 Jones teaches a terminal device according to claim 23. Jones does not specifically teach wherein said control circuit controls said switching circuit to switch from said first path to said second path, it accordance with a designation inputted from said second external device through said communication circuit. Benton teaches this (col 4 lines 43-49)(Fig 1/30). It would have been obvious to one skilled in the art at the time ofthe invention to combine Jones in view of Brachtl and further in view of Benton to teach the above. The motivation for this is to manage account transactions for designated accounts.

21. As per claim 39 Jones teaches a terminal device according to claim 36. Jones does notspecifically teach wherein electronic money can be transmitted along a second path regardless of the operational state of the first external device.Brachtl teaches this. Brachtl teaches an electronic funds transfer system(EFT) in which terminals are connected through a public switched telecommunications network to card issuing agencies data processing centers(Abstract)(Fig 2)(Fig 1/10/12/14/16/18/20)(col 6 lines 20-42). It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl and further in view of Benton to teach the above. The motivation is to provide a method for performing EFT under a higher security transaction system.

22.As per claim 40 Jones teaches a terminal device according to claim 37. Jones does not specifically teach wherein electronic money can be transmitted along a second path regardless of the operational state of the first external device. Brachtl teaches an electronic funds transfer system(EFT) in which terminals are connected through a public switched telecommunications network to card issuing agencies data processing centers(Abstract)(Fig 2)(Fig 1/10/12/14/16/18/20)(col 6 lines 20-42). It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Brachtl and further in view of Benton to teach the above. The motivation is to provide a method for performing EFT under a higher security transaction system.

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23. Claims 36-37 are rejected under 35 USC 103(a) as unpatentable over Jones(US Pat. No: 5,623,547) and further in view of Benton(US Pat. No: 4,454,414).

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24. As per claim 36 Jones teaches a terminal device used in an electronic money system, comprising a first terminal device including an input device which enters data from a first external device, a communication circuit which communicates with a second external device through a public line(co14 lines 6-12)(Fig 1/5)(col 5 line 41). Jones fails to teach a light receiving device which receives light signals a second terminal device including, a data processor which processes data in an IC card storing electronic money information, a light emitting device which.generates light signals for sending to said first terminal device, and a control circuit which controls said data processor and said communication circuit. Benton teaches a light receiving device which receives light signals and a second terminal device including a data processor which processes data in an IC card storing electronic money information(col 2 lines 17-20), as well as a light emitting device which generates light signals for sending to the first device and a control circuit which controls said communication circuit(col 3 lines 23-35)(col 3 lines 8-22)and a switching circuit in said first terminal device(col 4 lines 43-49)(Fig 1/30), which switches between a first path and a second path, said first path outputting data input from said first external device to said communication circuit, and said second path outputting electronic money data from said data processor of said second terminal input through said light receiving device to

said communication circuit(col 3 lines 11-13) wherein said control circuit in said second terminal device controls said switching circuit to switch from said first path to said second path at a time of transaction of electronic money(Fig 1/30). It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Benton to teach the above. The motivation for this is to teach an optically coupled electronic money transaction system.

25. As per claim 37 Jones teaches a first terminal device used in an electronic money system having a second terminal device including a data processor which processes data in an IC card storing electronic money information(col 2 lines 15-45), which communicate with each other through a public communication line(col 4 lines 6-12)(Fig 1/5)(col 5 line 41). Jones fails to teach an optically coupled electronic money transaction system. Benton teaches a light emitting device(col 4 line 51)(Fig 1/32) which generates light signals for sending to said first terminal device and a control circuit which controls said data processor, said first terminal device comprising an input device which enters data from a first external device a communication circuit which communicates witha second external device and a light receiving device(Fig 1/34) which receives light signals and a switching circuit(co14 lines 43-49)(Fig 1/30) which switches between a first path and a second path(col 4 lines 47-49), said first path outputting data input from a first external device to said communication circuit(col 3 lines 17-21) and said second path outputting electronic money data from said data processor of said second terminal device input through said light receiving device to said communication circuit(col 3 lines 11-I3)wherein said switching circuit switches from said first path to said second path at a time of transaction of

electronic money according to a control signal from said control circuit in said second terminal device(Fig 1/30). It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Benton to teach the above. The motivation for this is to teach an optically coupled electronic money transaction system.

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Response to Arguments

26. Applicant's arguments filed 9/15/03 have been fully considered but are moot in view of the new grounds of rejection.

Conclusion

27. **THIS ACTION IS MADE NON-FINAL.**

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28. Any questions concerning this communication should be addressed to the examiner of record, Dr. Geoffrey Akers, P.E., who can be reached between 6:30 AM and 5:00 PM Monday through Friday at 703-306-5844. If attempts to contact the examiner are unsuccessful, the examiner's superior, Mr. Vincent Millin, SPE, may be telephoned at (703)-308-1065.

The fax number for Formal or Official faxes and Draft or Informal faxes to Technology Center 3600 or this Art Unit is (703)-308-3687. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)-308-1113.

GRA/November 3,2003

DR. GEOFFREY R. AKERS, P.E.
PRIMARY EXAMINER